

REMARKS

Claims 1-35, as amended, and new claim 36 are pending in this application. In this Response, Applicant has amended certain claims. In light of the Office Action, Applicant believes these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicant respectfully submits that the claim amendments do not limit the range of any permissible equivalents.

In particular, independent claims 1 and 28 have been rewritten to further clarify the invention. Accordingly, various claims have been rewritten to maintain consistency with the subject matter recited in the independent claims from which they depend. In addition, new claim 36 has been added to recite an embodiment of the invention fully supported by the Written Description. *See, e.g.*, Page 12, lines 27-30. As no new matter has been added, Applicant respectfully requests entry of these amendments at this time.

THE OBJECTIONS TO THE DRAWINGS

The drawings were objected to for the reasons set forth on pages 2-3 of the Office Action. In response, Applicant submits replacement sheets for Figures 3a-3b and 5 in compliance with 37 C.F.R. § 1.121(d). In light of the corrections to the drawings, Applicant respectfully requests approval thereof.

THE OBJECTIONS TO THE WRITTEN DESCRIPTION

Various portions of the Written Description were objected to for the reasons provided on pages 3-4 of the Office Action. Applicant respectfully submits that the use of the term “calibration fixture” on Page 10, lines 1-2 is correct. For example, the calibration fixture 30 shown in Figure 9 allows pivoting of the club to more accurately calibrate the system. *See, e.g.*, Page 10, lines 1-9 and Fig. 9. In contrast, the calibration attachment is secured to the club face and does not play a role in pivoting absent moving with the club the club is pivoted within the calibration fixture. *Id.*; see also Page 10, lines 10-20.

Applicant has made every attempt to address all of the remaining concerns set forth by the Examiner. Withdrawal of the objection is respectfully requested.

THE OBJECTIONS TO THE CLAIMS

The Examiner objected to various claims as explained on Pages 4-5 of the Office Action. In response, claims 8-34 have been renumbered 9-35 and the dependency of these claims has been updated where necessary. In addition, the claim informalities of concern to the Examiner have been corrected.

However, with regard to the objection of claim 24, Applicant respectfully submits that this claim does comply with 37 C.F.R. § 1.75(c). For example, a system that has the ability to shutter two times would be within the scope of the claim 1. In contrast, this same system would not be within the scope of claim 24 as presently recited because of its “limited” shuttering ability.

In light of the amendments to the claims, Applicant respectfully submits that the objections are overcome.

THE REJECTION UNDER 35 U.S.C. § 112

Claims 6-8, 28, and 35 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In light of the amendments to the claims at issue, Applicant respectfully submits that this rejection is overcome. As such, reconsideration and withdrawal of the rejection is respectfully requested.

THE REJECTIONS UNDER 35 U.S.C. § 102

Claims 1, 4, 9-14, 17-18, 21, and 24-31 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent Publication No. 2002/0173367 to Gobush (“Gobush ‘367”) for the reasons provided on pages 8-9 of the Office Action. As discussed in greater detail below, Gobush ‘367 does not teach each and every element recited in the rejected claims.

Gobush ‘367 generally discloses a launch monitor system including two cameras. While this system includes a calibration fixture, the calibration is based on two cameras. Accordingly, calibration of the two camera system is based on images taken from two cameras. In particular, Gobush ‘367 refers to U.S. Patent No. 6,241,622 for details of the calibration step. Para. 0083. The ‘622 patent teaches the use of a calibration fixture 170 that is placed in an appropriate location at the end of distance calibrators 158, 160 so that the fixture 170 and golf ball are in full view of each of the cameras. Col. 9, line 32 to Col. 50. Both cameras take a picture of the calibration fixture and the images are sent to a buffer (Step 122) and the system is calibrated (Steps 123-125). *Id.* There is

no instruction in the '622 patent or Gobush '367 regarding a rotatable calibration fixture as presently recited in claim 1 or the ability to take a second image of the contrasting areas from a second perspective view from a single camera as recited in claim 28.

Moreover, there is no motivation for a person of ordinary skill in the art to modify the two camera system described in Gobush '367 to a one camera system with the presently recited calibration features absent the use of impermissible hindsight.

With regard to claims 6 and 35, the calibration of the system in Gobush '367 also does not include a calibration attachment, as presently recited in claim 1, or a method that includes a calibration attachment, as presently recited in claim 28.

For at least these reasons, Gobush '367 does not anticipate or render obvious the presently recited claims.

THE REJECTIONS UNDER 35 U.S.C. § 103

Claims 2-3 and 5 were rejected under 35 U.S.C. § 103(a) as obvious over Gobush '367 patent in view of U.S. Patent Publication No. 2002/0155896 to Gobush ("Gobush '896") as stated on page 14 of the Office Action. The Examiner rejected claims 6-8, 15, 19-20, 22-23, 35 under § 103(a) as obvious over Gobush '367 patent in view of U.S. Patent No. 5,575,719 to Gobush ("the '719 patent"). Claim 16 was rejected under § 103(a) as obvious over Gobush '367 in view of the '719 patent and further in view of U.S. Patent No. 6,471,862 to Reda. Claims 32-34 were rejected under § 103(a) as obvious over Gobush '367 in view of Gobush '896 and further in view of the '719 patent.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Young*, 927 F.2d 588,591 (Fed. Cir. 1991). Neither combination of references render obvious the presently recited claims for at least the reasons discussed below.

As discussed above, Gobush '367 relates to a two camera system with a calibration function that is based on two cameras. As such, Gobush '367 does not disclose or suggest a rotatable calibration fixture that allows calibration of a one camera system through pivoting. The systems described in Gobush '896 and the '719 patent are based on two camera systems and, thus, the calibration of those systems similarly requires the use of images from both cameras.

In particular, Gobush '896 includes two ball cameras and two club cameras. *See, e.g.*, Figure 1. The system uses the two dimensional data obtained from cameras CC1 and CC2 for calibration. Para. 0058. The reference is completely silent on the use of a calibrating a single camera system in the manner presently recited. Likewise, the '719 patent teaches calibration of cameras 18 and 19, but does not teach a one camera system or a method for calibration of such a system. Col. 3, line 54 to Col. 4, line 67.

In light of the similarities between the Gobush references cited, Gobush '896 and the '719 patent do not remedy the deficiencies of the primary Gobush reference (Gobush '367) with respect to the present invention. In addition, based on the limited nature with which the Examiner has cited and referenced Reda, and based on the fact that Reda does not use an image analyzer, Reda also does not cure the deficiencies of Gobush '36 with respect to the present invention.

In sum, no combination of the cited references renders the presently recited claims obvious. Therefore, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection based thereon.

CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicant invites the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Fee Sheet Transmittal is submitted to pay for the additional claim added with this response. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Bingham McCutchen LLP Deposit Account No. 195127, Order No. 20002.0313.

Respectfully submitted,
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